

IN THE SPECIFICATION

Please amend the specification as follows:

Amend page 3, second full paragraph, to read as follows:

The present invention will be more readily understood from the following detailed description of preferred embodiments with reference to the accompanying figures which show:

FIG. 1 an example for a 16-QAM signal constellation;

FIG. 2 an example for a different mapping of a 16-QAM signal constellation;

FIG. 3 two further examples of 16-QAM signal constellations;

FIG. 4 an exemplary embodiment of a communication system according to the present invention; and

FIG. 5 details of a table for storing a plurality of signal constellation patterns; and

FIG. 6 shows the communication system according to the present invention with an interleaver/inverter section.

Amend the paragraph bridging pages 8 and 9 and the first paragraph of page 9 to read as follows:

If the constellation rearrangement is performed by applying different mapping schemes, one would end up in employing a number of different mappings as given in Figure 1, Figure 2 and Figure

3. If the identical mapper (e.g. Figure 1) should be kept for all transmit diversity branches, e.g. mapping 2 can be obtained from mapping 1 by the following operations:

exchange positions of original bits  $i_1$  and  $i_2$

exchange positions of original bits  $q_1$  and  $q_2$

logical bit inversion of original bits  $i_1$  and  $q_1$

Alternatively, those bits that end in positions 1 and 2 can also be inverted (resulting in a different mapping with an identical bit-reliability characteristics). Accordingly, mapping 2 can be obtained from mapping 1, using an interleaver/inverter section 14 (see Fig. 6) which performs interleaving and/or inverting of the bits.